

CHAPTER 52-03-07 PENETRATION TEST

Section	
52-03-07-01	How Conducted
52-03-07-02	Points of Impact
52-03-07-03	Rejection of Helmet

52-03-07-01. How conducted.

1. The complete helmet shall be placed on a rigid head form covered with an electrically-conducting material.
2. Penetration tests shall be conducted by dropping a six pound, ten ounce [3 kilogram] penetration striker a distance of thirty-nine and thirty-seven hundredths inches [1 meter] measured from the outer surface of the helmet to the tip of the striker.
3. The impact tip of the striker shall be a cone with an included angle of sixty degrees and an altitude of at least one and five-hundredths inches [26.67 millimeters].
4. The radius of the striking point shall be one hundred ninety-seven ten-thousandths of an inch [.5 millimeters] and its hardness sixty C. Rockwell.

General Authority: NDCC 39-02-03

Law Implemented: NDCC 39-10.2-06

52-03-07-02. Points of impact.

1. The helmet shall be subjected to impact of the striker dropped (free fall) onto the outside surface of the helmet in a direction essentially perpendicular to the surface.
2. The points of impact shall be one in each sixty degree quadrant of the helmet at a radial distance of from four to five inches [10.16 to 12.7 centimeters] from the apex and also at the apex.
3. Ten impacts in these quadrants shall be accomplished on the four sample helmets with at least one impact on each sample.

General Authority: NDCC 39-02-03

Law Implemented: NDCC 39-10.2-06

52-03-07-03. Rejection of helmet. The helmet shall be rejected if electrical contact is made between the impactor and the conducting surface of the head form during any of the ten impacts supplied in the preceding section.

General Authority: NDCC 39-02-03

Law Implemented: NDCC 39-10.2-06